

[ What is claimed is: ]

1. A control method for a magnetic disk drive having  
a processing unit controlling the magnetic disk drive,  
a magnetic head reading information on a magnetic disk  
medium, and

an electronic circuit having a function to amplify said  
information read from said magnetic disk medium, a function to  
detect back electromotive force from a VCM actuator, a function  
to convert said back electromotive force detected as an analog  
value to a digital value, and a function to transfer said  
amplified readout information signal to said processing unit,  
comprising the steps of:

1st step for stopping supplying an electric power to the  
whole of or a part of said functions to amplify said information  
read from said magnetic disk medium and to transfer said  
amplified readout information signal to said processing unit,

2nd step for seeking said magnetic head by using said back  
electromotive force of said VCM actuator,

3rd step for starting supplying an electric power to the  
whole of or a part of said functions to amplify said information  
read from said magnetic disk medium and to transfer said  
amplified readout information signal to said processing unit,

4th step for secondly stopping supplying an electric power  
to the whole of or a part of said functions to amplify said  
information read from said magnetic disk medium and to transfer

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said amplified readout information signal to said processing unit, and

5th step for secondly seeking said magnetic head by using said back electromotive force of said VCM actuator.

2. The control method according to claim 1, further comprising between 3rd step and 4th step,

an additional step for amplifying said information read from said magnetic disk medium.

3. The control method according to claim 1, wherein the procedure from 3rd step to 5th step is repeated regularly or irregularly.

4. The control method according to claim 1, wherein the procedure from 3rd step to 5th step is repeated with a geometric series-like, a exponential function-like, or elementary function-like period, or repeated with such a period as said seek velocity is kept at a constant value.

5. A control method for a magnetic disk drive having a processing unit which controls the magnetic disk drive, an MR head which reads information on a magnetic disk medium,

a read-write IC which has a function to amplify the information read from the magnetic disk medium and a function to shut off a sense current to the MR head and to provide it to the MR head, and

an electronic circuit which has a function to detect a

back electromotive force from a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital value, and a read-write channel to transfer an amplified information to the processing unit, comprising the steps of:

1st step in which the sense current is shut off and an electric power is stopped in the whole of or a part of the read-write IC and the read-write channel,

2nd step in which the MR head is moved by using the back electromotive force of the VCM actuator,

3rd step in which the sense current is provided and an electric power is supplied to the whole of or the part of the read-write IC and the read-write channel,

4th step in which the information read from the magnetic disk medium is amplified,

5th step in which the sense current is shut off and an electric power is stopped in the whole of or the part of the read-write IC and the read-write channel, and

6th step in which the MR head is moved by using the back electromotive force of the VCM actuator.

6. A magnetic disk drive, comprising:

a processing unit which controls the magnetic disk drive, a magnetic head which reads information on a magnetic disk medium, and

an electronic circuit which has a function to amplify the

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information read from the magnetic disk medium, a function to detect back electromotive force from a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital value, and a function to transfer the amplified information to the processing unit,

wherein the magnetic disk drive has

a function to execute an idle seek by using the back electromotive force of the VCM actuator without amplifying the information read from the magnetic disk medium, and

a function to amplify, after the idle seek, the information read from the magnetic disk medium, to obtain a position information of the magnetic head, and then to change a direction of the idle seek.

7. A magnetic disk drive, comprising:

a processing unit which controls the magnetic disk drive,

a magnetic disk medium,

a magnetic head which reads information on the magnetic disk medium, and

an electronic circuit which has a function to amplify the information read from the magnetic disk medium, a function to detect back electromotive force from a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital value, and a function to transfer the amplified information to the processing unit,

wherein the magnetic disk drive executes an idle seek by

using the back electromotive force of the VCM actuator without amplifying the information read from the magnetic disk medium.

8. The magnetic disk drive according to claim 7, wherein if the magnetic disk drive has a magnetic disk medium having 8000 cylinders on it's surface,

then a direction of the idle seek is reversed when the magnetic head is in a range from 0th cylinder to 500th cylinder and in a range from 7500th cylinder to 8000th cylinder on the magnetic disk medium.

9. A magnetic disk drive, comprising:

a processing unit controlling the magnetic disk drive,

a magnetic disk medium,

a magnetic head reading information on the magnetic disk medium, and

an electronic circuit having a function to amplify the information read from the magnetic disk medium, a function to detect back electromotive force from a VCM actuator, a function to output a signal corresponding to the back electromotive force, and a function to transfer the amplified information to the processing unit,

wherein the magnetic disk drive executes an idle seek by using the back electromotive force of the VCM actuator without amplifying the information read from the magnetic disk medium.